QUA-RAE

HERE IS NEWS OF . . . . . THE RADIO ASSOCIATION OF ERIE

VOL. II No. 5 SERVING TRI-STATE AMATEURS FOR 25 YEARS DECEMBER, 1970

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REGULAR MEETING DATES--December 3 and 17
SPECIAL ACTIVITIES MEETING-DECEMBER 9
ZURN SCIENCE HALL 8:00 PM

MERRY CHRISTMAS AND A HAPPY NEW YEAR

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OUR SILVER ANNIVERSARY YEAR

JAMES CURRIE IS NAMED HAM OF THE MONTH

...ead [illegible] measure of talking ... Jim is president ... the S.I. Boundary Company and one soon realizes that his affable personality ... has [illegible] contributed to his reaching "the top of the heap."

Jim is so active that one wonders where he gets enough energy to go around. He was a navy pilot during WW II and has remained active in the aviation field ever since. He has 4K to 5K hours of flight time to his credit, and flies his own single place plane--a Pitts Special Areobatic. Among the organizations that Jim is involved with are the Aviation Club and the Experimental Aircraft Association. Jim is also Chairman of the Board for the Erie County Mental Health and Retardation Association and is a member of the board at both local hospitals.

Jim, who was first licensed in 1948, has not been too very active in ham radio for the past ten years. His hamshack which is located at his homeQTH at 1929 South Shore Drive boasts Collins equipment. The transmitter is a KWS-1 and the receiver is the famous 75A4. A 3-band Quad sits atop his 54' foldover tower. Most operation is on SSB, although AM is used on occasion. The only ham magazine that Jim reads regulary is QST. Jim says that one of his most enjoyable contacts was the time that he worked the South Pole and was able to complete a phone patch between the owner of Syd's Grill and his son who was stationed at the navy base there.

Not all of Jim's hamming is done from his home, however. Since he travels quite a bit on Company business, he has a Drake TR3 mounted in the Company plane. Power is supplied by a power inverter which supplies 110 volts to the cabin. The antenna is a trailing long wire which is reeled out to the proper length for each band. Jim said that the 2M FM activity interested him and he is considering installing a rig in the plane. (We tried our best to encourage him in this new venture, but how enthusiastic can one be when comparing a 4,000 ft. antenna to a 35 ft. one??)

Jim drives a Maserati sports car but when we looked around for the mobile rig, he mumbled something about a microphone cord wrapped around the steering wheel and said he preferred areonautical mobiling.

Jim has a QTH in Florida, too, where he uses the TR3 to feed a Mosley TA33 Jr. He also has a small outboard motor boat and enjoys the local fishing down there.

To you, W3PJD, ham, pilot, leader . . . Radio Association of Erie extends best wishes. . . see 'ya further down the log.

* RAE MINUTES *

November 5, 1970

The meeting was called to order at 8:40 PM by Vice-president, K3VXE.
Officers present: WA3MAU, K3VXE, W3ZLO.
Directors present: WA3HDK, WA3GIV, W3KPM, W3SN and K3VLP.

The October 22nd minutes were read and approved. They were read on six meters by WA3HDK. The Treasurer's report indicated that after paying bills, the new balance was $307.38.

CORRESPONDENCE: WA3HSR read a letter received from Jesse Bieberman, W3KT, concerning his speaking engagement with the RAE and advising that he will attend and speak at the PARC meeting November 18. K3VXE, after a phone conversation with W3KT, advised that Jesse Bieberman will speak at the RAE activities meeting November 19 as originally planned. - - - K3VXE read a copy of his letter sent to the Times News managing editor, requesting them to drop the amateur radio article as reported by John Yokoff, K3AFO. - - - A letter draft was read by K3VXE, which Ron wanted to send to the Atlantic Division ARRL Director, Harry McConaghy, advising him of the RAE's reciniding their nomination of K3AFO as assistant director from this area. WA3GIV moved that this letter be sent, seconded by W3KPM, voted on and carried.

COMMITTEES: WA3HSR reminded everyone of Jesse Bieberman's visit on November 19. Mike also advised that a plaque was purchased to be given to W3KT for his service to amateur radio over the years. - - - K3VXE advised that Jerry Selvaggi, research engineer at Gannon College will speak on acoustics at the December RAE activities meeting. This meeting is scheduled for the second Wednesday in December and a place of meeting to be determined later. - - - WA3HSR reported that 226 copies of the QUA-RAE will be mailed this evening after the meeting. Editors had a breakdown of printing equipment, but this was corrected easily. - - - WA3GIV had nothing to report on the COM Truck at this time.- - - W3ZLO of the repeater committee reported that the TPL unit was almost ready as soon as crystals arrive. Chuck also advised that negotiations were still going on for use of the police tower for the repeater antenna. K3VXE elaborated on the frequency allocations established earlier at the Canadian Repeater conference. - - - W3KPM reported on the death of Gil Crossley, and on behalf of the RAE he had sent flowers to State College, Pa. Tom also advised that more coupons will be clipped later this month. Tom advised the membership that the Civil Defense people had purchased the new tires for the COM Truck, and that the RAE only paid for the service charge to mount these tires. A listing of films available from the CD library was turned over to K3VXE and he was also advised that a new film is available (locally) for showing later as the RAE desires. W3ZLO was given his RACES license by W3KPM.

There was no old business at this time.

NEW BUSINESS: W3SN informed members of a chemical society meeting to be held at the Zurn Hall by NASA officials discussing how to analyze moon rocks, and all members were invited to attend this meeting. W3SN was then appointed to check into the possibility of the RAE securing Zurn Hall for future RAE activities. - - - K3VXE suggested that the RAE have a Christmas Party this year. After much discussion, Ron advised he would check more on this and report back later. - - -

cont....

NEW BUSINESS (cont):

K3VLP, chairman of the 1971 HAMFEST, indicated the possibility of having a summer picnic next August as well as the HAMFEST for next year. George is to work on this and report back later.

W3ZLO, repeater committee chairman, made the following three motions acted upon by the membership as follows:

(1) The treasurer of the repeater committee and the treasurer of the RAE be made one and the same person who shall handle the committee treasury as a part of the RAE treasury as the committee officers direct. This motion was seconded by WA3HDK, was voted on and carried.

(2) The repeater committee treasury be funded up to $25.00 per year automatically, non-refundable, and over that amount if the RAE decides by vote.

By "funding" is meant that the committee may overdraw from its account in the RAE treasury, a gross maximum of $25.00 at one time, not to exceed a net maximum of $25.00 over the entire year. This money need not be refunded to the RAE treasury by the repeater committee unless decided otherwise by the RAE membership. This motion was seconded by K3VLP, was voted on and carried.

(3) The Radio Association of Erie donate $50.00 to the repeater committee. This motion was seconded by WA3HSR, was voted on and carried.

WA3HDK suggested that the RAE try and establish credit with the Addressograph-Multigrath Co. for printing supplies. - - - WA3GIV was authorized to establish a credit account with the Sentry Crystal Co. on a motion by WA3HDK, seconded by W3SN, voted on and carried. - - - K3VLP indicated that W3ALD of the Lake Erie Amateur Radio Club would like to come in with the RAE on its auction next April. George was to look into this and have more information later. - - - WA3HSR reported that a key to the Post Office Box was not turned in by the previous officers and that the editors had the lock changed. K3VXE and WA3HSR are the only ones who have the new keys. - - - WA3HDK reported that several members still owe either tickets or monry from the HAMFEST raffle and he would like to hear from them.

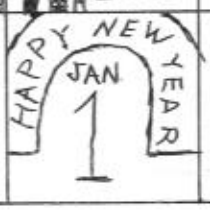
No bills were turned in for disposition at this meeting.
13 members and one guest were present.
A motion for adjournment was made at 9:45 PM by WA3GIV, seconded by WA3MAU voted on and carried.

Respectfully submitted,
Chuck Manross, WA3KAI

* * * * * * * * * * * * * * * * * * THOUGHT OF THE MONTH * * * * * * * * * * * * * * * * * *

If Bill Jones opens a store, then goes out of business, and thirty years later another Bill Jones goes into business, is it a new business, or a reorganization of the old one ?

* *

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
NOVEMBER LEEN-29150 TRI-ST. - 50.52 29	30	DEC 1	2	RAE BUSINESS 3	4	INDIANA QSO PARTY 5
LOCAL NETS 6	7	8	RAE ACTIVITIES SPECTACULAR ZURN HALL 8:00 9	XMAS PARTY 10	11	11 Shopping days 'till XMAS 12
NETS 13	14	15	16	RAE 17	18	19
NETS 20	21	22	23	 24	 25	300 Shoppin' days till XMAS-1971! 26
NETS 27	28	29	30	 31		2

DECEMBER, 1970

With the arrival of the holiday season, the RAE plans to be in the thick of celebration. The activities meeting on December 9, promises to be an interesting one for all, and the Christmas party following in the RED CROSS building should leave everyone in a good mood for work the next day. We hope to see a good turnout to close out the year 1970, an eventful one to say the least.

The November meeting with Jesse Bieberman, W3KT was attended by 45 people. Those in attendance were treated to an informative but humerous discussion concerning the operation and problems of a QSL Service. Jesse's timely bits of wit helped all to realize that operating such a service, even though time comsuming, can be fun and full of priceless experiences. The RAE was proud to have such a dedicated member of the amateur fraternity visit them. W3KT was also presented with a plaque, honoring him and his 23 years of service to amateur radio. Upon the presentation of the award, Jesse was almost speechless as few groups show their appreciation in such a way. There were also 12 door prizes given away and refreshments were served to complete one of the most entertaining activities meetings in a long time. We hope that all in attendance came away with a little more appreciation for hams as dedicated as W3KT.

Now that the weather has closed in, why not check in to the local emergency nets. The Lake Erie Emergency Net at 8:00 PM on 29.150 and the TRI-STATE Net on 50.52 MHz, at 9:00 PM. Both nets grace the airwaves on Sunday. Why not volunteer your services as Net Control and take an active part?

********** DECEMBER ACTIVITIES SPECTACULAR **********

HOW THE HUMAN VOICE WORKS

JERRY A. SELVAGGI, Director of Engineering Research at Gannon College, and Joseph L. DeClerk, research scientist at Ft. Monmouth, N.J., will be the featured speakers at a special activities meeting WEDNESDAY, DECEMBER 9, at 8PM in the new ampitheater lecture hall in ZURN SCIENCE CENTER, Gannon College.

Topic of the talk will be the recent discoveries made in analyzing the human vocal tract. Mr. DeClerk is bringing with him excellent X-ray films and slides which will be shown to demonstrate how the problem was approached.

Mr. Selvaggi and Mr. DeClerk have presented papers on this topic to the Acoustical Society of America at Miami Beach, Fla., and to the 6th International Congress on Accoustics , Tokyo, Japan. The approach taken at the presentation will be non-rigorous and informative and no great mathematical or technical background should be necessary to understand the presentation.

CHRISTMAS PARTY

Immediately following the Dec. 9th activities meeting will be a Christmas party at the Red Cross building, 150 W. 6th St. This is just a block away from the Zurn Science Building.

The RAE Auxiliary will prepare the food and there will be fun and surprises for everyone.

DON'T FORGET THAT DATE:::WEDNESDAY, DECEMBER 9--- SEE YOU THERE

****

FM VHF NEWS

The RAE has donated $50 to the FM Repeater Committee. The Committee treasury has been placed in an account within the RAE treasury and has been allowed deficit funding not to exceed $25 per year.

Fred, WA3GIV, after a multitude of troubles, is finally on the air from his mobile 41-V. Fred went through a starter solenoid and a horn relay before he obtained a Motorola solenoid that wouldn't burn out. He was also plagued with vibrator hash in his audio. For those who might have this same problem, here is the most common cause.

Hash normally develops when the case ground (PTT ground) is directly connected to the microphone element shield at the head or in the microphone. This condition is alleviated when the microphone shield is left floating (not grounded to the head) and just connected to pin #2 (microphone ground) on the master 41-V connector. Most mobile mikes have a seperate case ground wire and microphone shield, and it is just the case of installing the proper connector. A regular two-circuit phone plug cannot be used. Instead a standard Amphenol 4-pin (or 3-pin) plug must be used.

WA3PJL, Larry Jones, is a new voice on 94 for most of us. He is putting out a terrefic signal with his GE Prog-Line and J-beam antenna.

WA3HPG, John, is now mobile with his HW-17 rig and outboard Motorola receiver. That brings the total to four active FM mobiles in the area.

RAE COUNTY EXPEDITION - - 700 MILES OF FUN

Armed with rigs, generators, antennas and supplies, and haunted by bitter memories of last year's expedition, Ron, K3WYE, George, K3VLP, and Mike, WA3HSR, struck out for the wilderness of Pennsylvania on the evening of Friday the Thirteenth! This was to be the second county expedition sponsored by the RAE probably will go down as one of the most successful. The trip itself was in doubt because of the rapid weather changes that are common this time of the year, but the group decided that it wouldn't pay to wait any longer and left on time. The expedition was designed to give "County Hunters" a chance to contact some of the counties where few hams reside. The call of W3GV/M3 was heard nationwide and greatly appreciated by all.

The crew started with nearby Warren County and sped through to the more rare counties to the south. Forest, Elk, McKean and Cameron were some of the most wanted counties by the group. The County Hunters hangout is on 3.940 MHz known as the CHC/FHC Service Net (Certificate Hunters Club - Flying Hams Club), and another group meets at 3.930 MHz and calls itself the Independent County Hunter Net. Most of the activity of W3GV/M3 was on 3.940. The net starts at 8:00 PM and runs most of the night, so the expedition kept on moving as the night progressed. The conditions on 75 Meters were good until 3:00 AM when skip started to lengthen, so at 4:30 the tired and unshaven group checked into the hotel in Wellsboro, Pa. in hopes of getting a good night's sleep (No more roughing it this year!)

Awakening about 11:00 on Saturday morning, the group wondered what it was going to do for the rest of the day. George decided to look up an old ham buddy Jim Pollard, K3QET formerly of Erie. After having located him, Jim and George paid a visit to the hotel room and there the group rag-chewed for nearly two hours. By this time, everyone was feeling hunger pangs and went out for a bite to eat. The afternoon with Jim was an interesting one for all and Jim also said that he'd try and make it up for the 1971 Field Day exercises with the RAE. With that the crew set out again for some more counties.

In the afternoon, a county hunters net meets on 20 meters and W3GV/M3 spent most of the afternoon there running counties along the western side of the Susquehanna River. The previous night we received some requests for Snyder County which is about halfway between Williamsport and Harrisburg. Since quite a number of requests were received and the group wasn't in any particular hurry, they decided to travel the extra 50 or so miles and run the county. While setting up in Snyder County, George listened in on the Eye-Bank Net at 3970 KHz and afterward contacted George Roschy, W3LKJ. George gave Fred Tate, WA3GIV a call on the land-line and soon the whole group found out what was going on in Erie. Fred made a phone patch and several phone calls for the crew and then it was off and running for W3GV/M3 again. One thing that the crew failed to note when planning the expedition was the contest schedule. It seemed that our big night (Saturday) was going to be spoiled by the ARRL Sweepstakes. Sure enough, we barely got through Snyder County and were headed out of our way again for Montour County (Danville, Pa.) when the band seemed to jump with "CQ Contest" at almost every frequency, including the two nets on 75 Meters. With some luck we managed a few QSOs from Northumberland and Montour Counties but the rest of the way going back towards Erie was pure chaos. Things got so bad that the nets closed down and W3GV/M3 silently made its way through the center part of the state. At least we couldn't blame Murphy for that one! About 4:30 AM the tired group staggered into Erie and the second RAE County Expedition had become history. In all 161 contacts were made dispite the contest QRM and Murphy had stayed home. It is certain that W3GV/M3 will long be remembered by the hundreds of County Hunters and the group won't forget them either.

WOULD YOU BELIEVE ??? ANOTHER COUNTY EXPEDITION ??????

Well it's true! After the contest QRM died down a week later, George, K3VLP and Mike, WA3HSR set out on a more localized trip. Counties covered in the expedition were Warren, Venango and Crawford. It seemed that many of the county hunters hand missed us the previous weekend and many of them needed one of those counties to close out the whole state for them. So, with the horror of Friday the Thirteenth lifted from them, Mike and George had high hopes of another successful trip.

In reality, this third expedition was more successful than the second. Not as many counties were covered, but in the three counties that were run, 75 contacts were made; nearly half of what we made earlier running thirteen counties. At least 10 of the county hunters finished up the whole state that night and W3GV/M3 was even promised a chocolate cake by one of the happy bunch! Nearly 30 states were worked on this expedition using the HW-100 (previous one used SWAN Cygnet 270).

The only thing learned from this expedition was that cars aren't supposed to be chasing deers through fields when they are a sea of mud! The auto became stuck near Pleasantville (no pun intended) around 11:00 PM and by sheer fortune the group was pulled to safety by a couple of wonderful fellows who just happened to be passing by.

This year's county expeditions were both successful and the RAE plans to continue them in the future. Requests for counties are still being received and we hope to have another one in the making by spring. With the help of the operators on the expedition, the call of W3GV/M3 has achieved a high degree of respect and appreciation from hundreds of amateurs, nationwide. We hope to see more of you next time.

* * * * * * * * * * * * * * * * PROPAGATION REPORT *

Condensed from CQ MAGAZINE

The conditions during the month of December should bring good to excellent openings to most areas of the world on 10 meters. The 10 meter band should open shortly after sunrise and peak on signals from the east before noon. Signals arriving from the south should reach their peak during the afternoon hours, while signals from the west will peak during late afternoon and early evening. Fifteen meters should run neck-and-neck with 10 as the optimum band during daylight.

Twenty meters is expected to remain open from sunrise through the early evening to most areas of the world. Twenty may also propagate some DX during darkness. Best results should be around sunrise and in the early evening. On the lower frequency bands, DX signals should be at their strongest levels of the year as static levels reach their seasonal low. Best openings on 40 ans 80 meters will occur during hours of darkness. Openings on 160 meters are likely to take place if the transmission path is totally in darkness.

Some F-layer openings on 6 meters may be possible around noon and during early afternoon. Trans-equitorial scatter should lessen somewhat this month but still be possible between southern USA and points south. The second peak of sporadic-E propagation should also occur in December resulting in good short-skip on 6 meters of distances between 800-1400 miles. This condition will peak during early evening hours. The Geminids meteor shower on the 13 and the Ursids on the 21-22 should produce some meteor-scatter type openings. The present sunspot plateau continues and DXers should grab while the grabbing is good. It won't be around too much longer.

TRANSMITTER HUNTS

Rules and results

In order to refresh everyones memory, we are reprinting the rules for point scoring pertaining to the monthly transmitter hunts. They appeared in February, 1970 QUA-RAE, but several standings have been missed. The new scoring started with the October, 1970 transmitter hunt.

Basic Scoring (Each band individually)

First place	10 points
Second place	5 points
Other mobiles	2 points

Each licensed amateur who rides with a mobile is awarded one point. The amateur operating the mobile in search of the transmitter receives one point for each licensed amateur who is a passenger; a MAXIMUM of four points is set here. The hidden mobile forfeits any points he may have derived for passengers riding with him, but these passengers may claim a score of one point.

The first place winner of the hunt shall receive the option of hiding the transmitter for the next hunt. If he chooses to take this option, he receives 10 points. If the winner does not wish to hide the transmitter the following hunt, another individual who wishes or has been assigned shall take the responsibility of hiding it and shall receive the 10 points normally awarded to the hiding winner. A boegy of 10 points shall be awarded to any mobile who has been denied the opportunity of hiding the transmitter at least once in a given year, and who has participated in at least one hunt.

The rules mentioned above are the basic foundations for the transmitter hunts. If you wish a more detailed view, you can look in the February, 1970 QUA-RAE. These rules were established by Fred Tate, WA3GIV and Carl Rimmer, K3OSU.

STANDINGS AS OF DECEMBER, 1970

10 METERS		6 METERS	
W3HLM	22	W3ALD	20
WA3HSR	11	K3QAY	20
K3VXE	10	K3ATZ	5
K3PLV	10	WA3ISN	4
K3VLP	2		
WA3GIV	1		
WA3GUL	1		

These standings are believed correct but are not final. If any error is found, please contact either K3VXE or WA3HSR at once. We are trying to get them back up to date. The transmitter hunts during the months of December, January and Feb. have been cancelled because of the threat of bad weather. The decision was made by the group at the November hunt. We hope that with the arrival of March activity will again pick up. Don't forget that the winner of the most points on each band will receive a special prize at the RAE Dinner Banquet on October 9, 1971.

TECH TALK

To a new operator (or an old one for that matter), Standing Wave Ratio or SWR can be a confusing subject. There are many hams who treat SWR as a diety, and probably just as many who don't give a hoot. So here I shall try and present some facts so that the new operator may begin to become confused, and so that the older operator will be able to approach the subject more realistically.

The voltage standing wave ratio (VSWR) which most SWR bridges measure, is in essence the ratio between the transmission line characteristic impedence ad the antenna's charecteristic impedence. This ratio is measured by sensors in the transmission line which pick up current flow travelling down the line, toward the antenna, and current reflected back to the transmitter by the antenna. This current is converted to a voltage drop across a resistor, which is then measured by a meter which can be switched between the two sensors.

It will suffice to say for now that the only time that there is no reverse (reflected) voltage on the transmission line is when the transmission line impedence matches the antenna impedence. Since this is very seldom exactly the case, the operator should be able to interprit the readings he gets.

The practical significance of the SWR is transmission line loss and final tank loading. When the line is matched to the antenna (1 : 1 SWR) the power travels down the transmission line once and is totally absorbed by the antenna. The power reaching the antenna is then the power transmitted minus the transmission line losses. For an antenna impedence anything other than the line impedence, part of the transmitted power is reflected from the antenna back over the transmission line into the transmitter. Line losses also affect this power returning to the transmitter. Most of this power is reflected back from the from the transmitter final tank to the antenna, with the line loss acting upon it. The same cycle repeats itself until there is little left of the wave being watched. Thus, depending on the efficiency of the final tank and transmission line, little power could be lost due to high SWR, or much power could be lost in the wave's travels from one end of the line to the other. Irrespective of the transmission line's charecteristic impedence, the final tank sees the antenna impedence that is reflected back over the line. So final tuneup may be difficult if the circuit cannot match a wide range of impedences prevailant with high SWR's.

Another factor is dependant upon how the reflected waves are related in time to the other waves traveling down the line (or up). With a high SWR it is possible for the transmission line voltage to be up to 10 times higher than normal. This can cause arcing, breakdown of coaxial cable and more line losses.

But SWR is not the whole story. To radiate a signal efficiently, the antenna must be resonant. At resonance certain antennas have well-known impedences; the dipole is 72 ohms; vertical 36 ohms, folded dipole 300 ohms, etc. These antennas produce maximum field strength when tuned to these imput impedences irrespective of feedline SWR. Thus, many times an antenna will produce a stronger signal when there is a standing wave ratio on the line than if this ratio is made to null out by adjusting the antenna.

So a compromise must be made to optimise field strength, even at the expense of SWR, for in th long haul, it is the field strength that counts.

$\overline{AR}$ $\overline{DE}$ K3VXE, Ron

STRAYS
de QUA-RAE
Staff

WA3NGC Frank has finally bagged the DX on 10 meter AM. His 40 dipole is getting good results on all bands.

K3PLV Welcome back to Craig in the monthly transmitter hunts. How about that, taking first place right off the bat!!!!

W3QN Kenny, ex-8VH sends the RAE some contrasting pictures of his station in 1919, and today in 1970. Come and see them at the meetings.

W3LKJ Thanks goes to George for helping the county expedition from way-out Snyder County.

WA3LSY Rick is back in town after 18 months at DeVry Institute of Electronics in Chicago. Rick now sports a First Phone license as well as amateur Advanced. Nice going Rick.

WA3HJC Lee was in town during the Thanksgiving holidays renewing many acquaintences. Lee has 4½ years left in the U.S. Navy.

K3QET The RAE is looking foreward to having Jim, the "Queer-Eyed-Thug" operating with them on Field Day, 1971.

WA3MKA Carl has been heard working out well on 10 meter AM. He recently sent for his 10/10 certificate number and should have it by the time you read this.

W5KLV Jerry of San Antonio, Texas tells us that he hopes more people can be encouraged to get Novice tickets rather than CB licenses. Jerry is also PAM for South Texas Section of ARRL and a brand new 1971 RAE member.

K3AXS Everyone was glad to see Dick at the RAE Dinner Banquet and the November business meeting. Dick hopes to be back on the air soon.

W3BVM Hats off to Chuck who took some excellent pictures of the group at the November Activities Meeting. Maybe the refreshments helped???????

W3BRB John did the best job as NCS on LEEN in a long time. Look for WA3GJH, Joe, to take over in December.

W3NEM Bob has been doing a good job as SCM for the area. Have you noticed the increased coverage in the Station Activities section of QST?

W3NFM At the November Activities Meeting Dick renewed his ARRL membership through the RAE giving the club 50¢. How about some of you other fellas following suit?

K3KRA Gary is Net Secretary for the LEEN. If you desire to be NCS let Gary know as he'll probably be able to use you.

WA3KAI Chuck has been kept busy corresponding for the RAE as its secretary. Keep up the good work, Chuck.

STRAYS
continued

WN3LKR Brad will soon be "WA" as he passed his general exam recently. Now all he has to do is get a decent rig!!!!!

K3JOF Tom reads the QUA-RAE every month and would like to become more active. We at the RAE hope that Tom can get on the air soon.

W3KPJ Hank has been keeping the WPA SEC of ARRL represented the QST with his monthly reports. Hank is Section Emergency Coordinator for Western Pa.

WA3ANA That new antenna of Woody's put out a great signal on 10 during the LEEN.

WA3GIV Glad to see that Fred finally got that 2 meter FM rig working mobile. Two meter mobiles, active at least, are beginning to outnumber the rest.

K3VXE Thanks goes to Ron for lining up the very interesting group for the December Activities Meeting.

WA3HSR Hey Mike! Did you get a good look of that deer in Venango County?

K3VLP George has been working hard helping the QUA-RAE reach all hams in Erie County. He'll soon need some ointment for that writers cramp.

SALE, SWAP OR BUY

FOR SALE: Heathkit HR-10B receiver)
Heathkit DX-60B transmitter) _____ Don Plym, WN3LYK
455-0480 after 4:00 PM

3-element homebrew 15 meter)
beam. Worked 75 countries.) _____ Peg Sayre, WA3GMN
evenings 864-6335

* * * * * * * * * * * * *

The QUA-RAE is being mailed to all hams in Erie County. If we have missed someone, let us know. This practice will continue thru January, 1971. We hope that many of you now receiving the news-bulletin, will join the RAE so as to remain on the mailing list.

1971 RAE MEMBERSHIP BLANK

Enclosed is $_____ for ____ membership(s) to the RAE for the year 1971

NAME_____ CALL _____

ADDRESS _____ CITY_____ STATE_____

ZIP CODE_____ PHONE _____ ARRL MEMBER ___YES ___NO

WHAT ACTIVITIES WOULD YOU LIKE THE RAE TO SPONSER _____

_____

THANK YOU FOR YOUR SUPPORT. HOPE TO SEE YOU AT THE MEETINGS.

SEND TO: RADIO ASSOCIATION OF ERIE; PO BOX 844; ERIE, PA. 16512

HAMS ON THE MOVE

DE K3VLP

How many of you keep time with your foot while sending CW? What's CW?? The guy we are featuring this month always liked CW and some of my own first observations of him were that while he was sending, it was with the help of both feet, a wobbly chair, a cold basement (electric heat upstairs, none down) and a cellar floor that I swear cooperated by shaking the whole house with each dit and dah! He had what's been called the "Lake Erie Swing". HI

Jim, K3QET (called Queer Eyed Thug by those who dared) now resides in Osceola, Pa. with his XYL and 3½ harmonics, or should we say parasitics? Jim is employed in Wellsboro, Pa. at an auto parts store and is a commissioned officer in the Pennsylvania National Guard.

Jim also has a mountain-top retreat that he operates out of in the summer. His rig is a Heath Marauder HX-10 and the old HQ-110 that he had as a novice. He bragged about Erie and the fine bunch of hams so much, that the XYL demanded to meet us. He brought her up for a weekend last summer and wouldn't you know it, no one that he knew was home. He sent special greetings to W3SN, W3LKJ, K3EIU, K3LQN, K3HWR, K3QJE and all the bunch that spent many hours selling chances to raise funds for the power plant that the club bought.

In case you still don't know who Jim is, his last name is Pollard. His father used to hace the Ford dealership on upper Peach Street. We are looking foreward to Field Day 1971, when Jim promises to be present to meet with his old friends, find some new ones and to rag chew with and probably eat the whole 24 hours.

The QUA-RAE staff salutes Jim Pollard, K3QET, another home-town-ham who still remembers the home-town-gang.

DON'T FORGET - - JOIN THE RAE - - 12 BIG ISSUES OF QUA-RAE - - STILL $1.50.

MORE STRAYS

K3LQN Mitch the sell-out of the old Erie Coach Co. was A-OK, as he got a mobile camper out of it.

K3PCI John, are you still waiting for your October news bulletin? Or did you get it in November?

W3SN Bart, how many of the 50 or more members of your 1962 code and theory class are still on the air?

W3VHP Doc must have gotten response from last month. At the last meeting he was looking for a pole climber.

K3VBF Lowell got himself a 60 foot tower, now to tie something onto it.

* * * * * * * * * * * * * * NEWS FROM THE RAE HISTORIAN *

DE W3SN

HOW MANY ARE THERE ?

The RAE was incorporated in 1945. Only "Mac" MacIvor, W3AQY of the original group of club members has a record of continuous membership. However, there are still a fair number of surviving charter members. Such as:

Kenny Lloyd	W3QN
Walt Jordan	W3SLC
Ralph Owens	W3TXZ
John Krebs	W3LMK
"Osty" Ostberg	W3RHK
Frank Ames	W3WBM
Leo Weiner	W3LOS

We are reasonably sure of the list above, but there are others, about whom we have no definite record. We believe that Doc Cook and Doc Sheldon are both charter members but have no proof. If anyone has any information that would help, please get in touch with the RAE. Let's hear from some of you old timers.

It Didn't Hurt, But - -

de W8WBM (W3WBM)

We once knew a fellow named Rube,
Who went probing with a neon tube
In a rig of a hundred watts or more.

He poked around here and poked around there,
While tuning the rig to a hair.
"Never tune equipment with plate current
on," he knew by heart,
But forgot it right from the start.
The glow of the tube gave pleasure to him
As each new test made the tube less dim.
Up to the final tank coil proweled this chap,
Oblivious to all till he closed the gap.

Wham! With a crash he hit the floor,
Well, he just isn't anymore.

With the arrival of the new year, let's all make a resolution to keep safety first. Here's another reprint from the old column of 1941.

"Complaint, complaint, complaint - - the yl's and xyl's are up in arms because we have so far barred them from attending the meetings. It seems that the auxiliary is more of a title than an active organization, so now they want to get in on the bi-weekly rag-chews. The male club considered the case and agreed to permit the fair sex to attend the regular meetings, and this is as it should be, for an amateur is an amateur no matter if he be a she, or it be a him, etc. Come on gals and gallasses, we welcome you into the Erie Hamdom Club and expect you to promote the club's interests as we are trying to do."

That paragraph sounds like an early victory for Women's Lib. groups of 1941!

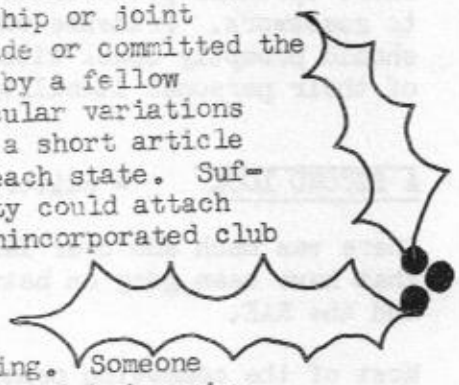
THE HAM CLUB AND THE LAW by M.L. HINDEN, W6EUV Reprinted from Sept. 1955 CQ

Like the unbled filter condenser, the unincorporated radio club, typical among hams throughout the country, is a potential source of violent shock. The shock comes usually in the form of a summons to appear in court to answer a legal action for damages. Once a danger is recognized we can take steps to protect ourselves. The real trouble occurs when we are not even aware that danger is present.

The amateur radio club usually takes one of three forms. The first is the small neighborhood group of hams who get together at non-scheduled meetings, has no name, has no organization and undertakes no organized activity. The second type club is a little more formal in organization. It may have regular meetings, officers, a constitution or by-laws, and plans for organized activities. The third is the club which is qualified as a non-profit corporation.

If a club is incorporated, the individual potential liability has already been reduced to the legal minimum. Except for the casual pleasure one may get in seeing how wise he was in forming or joining an incorporated club, he need not read further. If, however, he is a member of an unincorporated club of either the first or second type described above, he should read on. It may save lots of money in legal fees, court costs, and possible damage judgements.

Most of us have been brought up to recognize that if we commit some negligent, careless or foolish act, we are legally responsible for its consequences. Few of us, however, relish the idea of having to pay for the negligence, carelessness, or foolishness of someone else. That is what we are faced with legally in an unincorporated club. The legal theory involved has its origin in the liability aspects of common-law partnerships or joint ventures. Without attempring to go into all the ramifications of partnership or joint venture liability suffice to say, that the general law is that each partner, or joint venturer is personally liable and responsible legally for the acts and obligations of the whole partnership or joint venture. This is true regardless of whether or not you yourself made or committed the particular act in question, or whether the liability was incurred by a fellow partner or joint venturer. The extent of the liability and particular variations of the general law vary from state to state. It is impossible in a short article such as this, to analyze the problem in the light of the laws of each state. Suffice to say, there have been enough instances cited where liability could attach to innocent club members to make everyone who is a member of an unincorporated club take a long hard look at the danger.



Here are just a few examples of how liability can attach to you.

A. The club plans a picnic, or a transmitter hunt, or an outing. Someone drives his car recklessly and a stranger gets hurt. If the club is unincorporated, every member could be involved.

B. The club buys a club transmitter. Everyone may become liable for the full purchase price.

C. Someone leaves some equipment in a dangerous condition and an accident occurs. Again, everyone may become liable.

The examples could fill a book. It is just not possible to forsee every potential source of danger.

Unlike the partnership or joint venture, a corporation is an entirely new and seperate entity and seperate and distinct from its members. The general law imposes no liability or responsibility on the individual members for the debts or obligat-

cont'd...

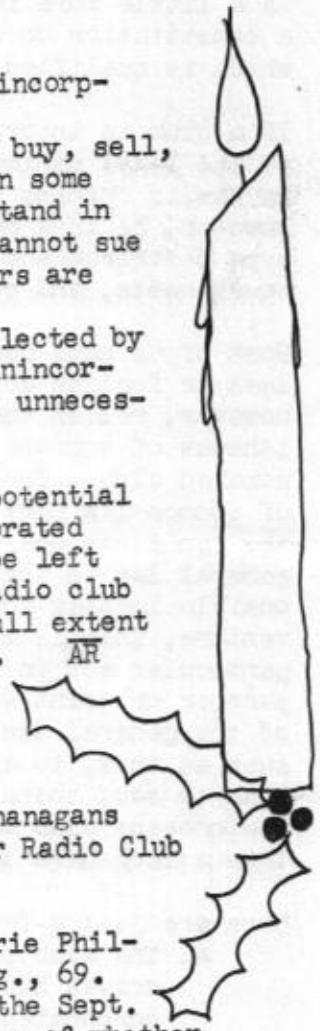
ions of a corporation. One member is not liable legally for the acts, negligence, or carelessness of another member. This is true even if the corporation is itself liable for the acts of its members. Thus, in one of the examples mentioned above, let us say that on a field day trip, an accident occurs and someone is injured. The person who actually did the act will, of course, be liable. The corporation may be also liable but the other members will not be liable unless they actively participated in the act of negligence themselves.

This aspect of limited individual liability makes the incorporation of amateur clubs highly desirable. More and more clubs are incorporating and very wisely.

A corporation has other advantages over an unincorporated club.

1. A corporation has perpetual life or a fixed term. The life of an unincorporated association is uncertain.
2. A corporation is a legal entity. It can own property, sue, be sued, buy, sell, or otherwise deal as an individual. An unincorporated association in some states is treated as a partnership in which title to property must stand in the joint names of the individual members. A partnership normally cannot sue in its own name, and if suit is brought against it, all of the members are necessarily made parties to the litigation.
3. Management of a corporation is well-defined. A board of directors, elected by the members, control the activities of the corporation. Control of unincorporated associations in many cases are indefinate, loose, and create unnecessary internal friction.

This article in its entirety is intended simply to point out a source of potential danger. The laws of your particular state may afford members of unincorporated clubs specific protection. This is something that cannot and should not be left to guesswork. Prudence would dictate that members of an unincorporated radio club should promptly check with a competent local attorney and ascertain the full extent of their personal liability under the laws of the state where they reside. AR



A SECOND LOOK * editorial comment by the QUA-RAE staff *

There was much ado over last month's editorial concerning some of the shenanagans that have been going on between certain members of the Presque Isle Amateur Radio Club and the RAE.

Most of the commotion centered around the adressograph machine that the Erie Philharmonic Society had allegedly donated to the NEWSLETTER. (Minutes, 21 Aug., 69. The previous editorial had been based on the minutes as they appeared in the Sept. 69 QUA-RAE, which mistakenly read "club,") The hassle lies in the question of whether the newsletter was property of the Editor, Mr. Yokoff, or of the RAE.

Under Old Business in the minutes of 17 July, 1969, is stated: "Newsletter discussion was held. K3HSM and K3AFO were put in charge of putting together a newsletter. They will be assisted by WA3GSH and W3BRB."
Since no motion was made, we would assume that this was in the form of an appointment by the chair, which would form a committee.

The books of the treasurer show that money was appropriated to the newsletter from

SECOND LOOK, cont'd

the RAE treasury. Since no formal motion was passed specifically funding Mr. Yokoff for any fixed ammount, but rather was allowed to operate on the standard $25 per month allotted to other standing committees, it had to be a committee of the club. The RAE was then in fact the publisher of the newsletter. Mr. Yokoff was in fact the editor of the newsletter. Normally, the editor of a publication is working as an employee of the publisher. As an employee he can decide to resign or can be fired, just like any other employee. However, the tenure of a publication does not follow the editor, but rather the publisher. Therefore, in the minutes, the term newsletter denotes the publisher of the newsletter, not the editor or the printer. Thus, in this respect, the terms "newsletter" and "club" can be construed as one and the same, as they obviously were when the August 21, 1969 minutes were transcribed to the September, 1969 QUA-RAE.

All that is said above can be documented, and if any party wishes to see the documentation he may request to do so at any RAE business meeting. We wish to conclude the adressograph issue here. We don't need it, we never needed it. The main thing we wish to point out is that the QUA-RAE was never a one-man operation. This was aptly pointed out in the SUB-ING IT UP in the very first issue edited by Mr. Yokoff. We therefore wish to close the issue here with the facts. Any other discussion, if pressed, will have to take place outside of this newsletter.

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THE FINAL FINAL

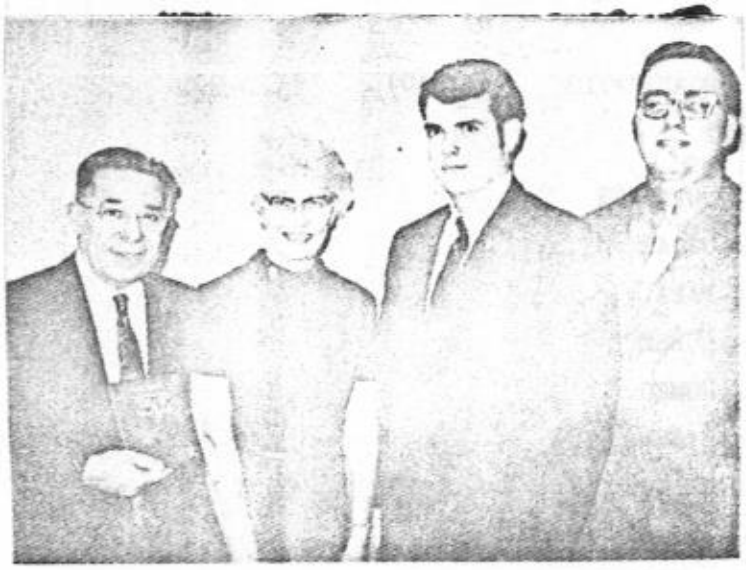
It is very seldom that we get a person with a three page resume of his work and publications to talk to an Amateur Radio Club, let alone two of them the same night. The human voice is often taken for granted, and is many times thought of as so complex to be beyond comprehension, except to certain select individuals. How uncanny and amazing it is then to see it reduced to transmission line and network equations. So, let's all come out to this meeting and show the engineers that Amateur Radio is interested in new technology as well as chasing DX and just operating. This will be a good opportunity to show key people that there is a difference between Amateur Radio and CB; that amateurs are still interested in the "how" it works as well as the "how well" it works.

The QUA-RAE staff, along with the Board of Directors and officers of the RAE, wish all of you a very happy, holy, and safe Christmas season. Merry Christmas!!!

We would also like to thank everyone who helps in any way with the QUA-RAE. Without their help we could not have continued with the standards that were set for us by the previous editor. Many thanks again!

73, Ron, K3VXE & Mike, WA3HSR SK

MAKE THE RAE YOUR BAG, TOO!



Jesse and Mrs. Bieberman with Mike Hall, WA3HSR, and Ron Jakubowski, K3VXE (L to R)

Mike awarding Jesse a plaque recognizing his 23 years of service as QSL manager for the 3rd call district.

IN MEMORIUM

It is with deep regret that we note the passing of Gilbert L. Crossley, W3YA, A3YA, November 5, 1970, following an extended illness. He had been recently been made an honorary Vice President of A.R.R.L. and had served as Atlantic Division Director for many years. Gil had more service in MARS than any other Pennsylvania member and served as assistant state MARS director. He taught for 44 years at Penn State University where he was Assistant Professor in Electrical Engineering. He resided in State College, Pa.

INTERNATIONAL CIVIL AVIATION ORGANIZATIO (ICAO)

PHONETIC ALPHABET

A--ALFA
B--BRAVO
C--CHARLIE
D--DELTA
E--ECHO
F--FOXTROT
G--GULF
H--HOTEL
I--INDIA
J--JULIETTE
K--KILO
L--LIMA
M--MIKE
N--NOVEMBER
O--OSCAR
P--PAPA
Q--QUEBEC
R--ROMEO
S--SIERRA
T--TANGO
U--UNIFORM
V--VICTOR
W--WHISKEY
X--X-RAY
Y--YANKEE
Z--ZULU

F.C.C. AMATEUR BAND LIMITATIONS (INCENTIVE LICENSING)

EXTRA CLASS	ADVANCED CLASS	GENERAL CLASS
3.5-3.8; 3.8-4.0	3.525-3.8; 3.825-4.0	3.525-3.8; 3.9-4.0
7.0-7.2; 7.2-7.3	7.025-7.2; 7.2-7.3	7.025-7.2; 7.25-7.3
14.0-14.2; 14.2-14.35	14.025-14.2; 14.2-14.35	14.025-14,2; 14.275-14.35
21.0-21.25; 21.25-21.45	21.025-21.25; 21.275-21.45	21.025-21.25; 21.35-21.45
28.0-28.5; 28.5-29.7	SAME AS EXTRA	SAME AS EXTRA
50.0-50.1; 50.1-54.0	SAME AS EXTRA	50.01-54